

**Notice of Allowability**

Application No.

10/502,097

Examiner

Roberts Culbert

Applicant(s)

ISHERWOOD ET AL.

Art Unit

1763

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the IDS filed 2/28/05.
2. ☒ The allowed claim(s) is/are 1-24.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date 2/28/05
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

### **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Richard Tushin on 9/28/06.

#### **Claims 1-24 are amended to recite as follows:**

1. A method of manufacturing a substrate comprising the steps of applying a resist to at least a part of a metallic layer on a first side of a substantially transparent polymeric film, removing metal from areas not covered by the resist to form demetallised regions, and applying a layer of polymeric liquid crystal material over the resist and the demetallised regions, wherein the resist is darkly colored so as to mask the underlying metal areas and give rise to a color shift effect in the areas covered by the polymeric liquid crystal material, and wherein the contrast between the metalized and de-metalized regions can be clearly distinguished.

2. A method as claimed in claim 1 in which the resist contains a dye or pigment, which is black.

3. A method as claimed in claim 1, further comprising the step of applying a substantially clear resist to at least another part of the metallic layer.

4. A method as claimed in claim 1 in which the removal of metal de-metallization process is carried out with a caustic wash.

5. A method as claimed in claim 1 in which negative indicia are formed by the de-metalized regions.

6. A method as claimed in claim 1 in which positive indicia are formed by the resist-covered regions.

7. A method as claimed in claim 1 in which the polymeric liquid crystal layer is applied by a coating process.

8. A method as claimed in claim 1 in which the polymeric liquid crystal layer is applied by a transfer process.

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9. A method as claimed in claim 1 in which the polymeric liquid crystal layer is applied by a lamination process.

10. A method as claimed in claim 1 in which the resist incorporates a conducting material to produce a machine-readable conducting layer.

11. A method as claimed in claim 1 in which the resist incorporates magnetic material to produce a machine-readable magnetic layer.

12. A method as claimed in claim 1 in which magnetic material is located in a continuous or discontinuous layer over the resist.

13. A method as claimed in claim 1 in which magnetic material is located in a continuous or discontinuous layer on a second side of the polymeric film.

14. A method as claimed in claim 1 in which the resist comprises a plurality of different colors.

15. A method as claimed in claim 1 in which a holographic structure is incorporated into the metal layer.

16. A method as claimed in claim 1 in which fluorescent, luminescent and/or phosphorescent material is incorporated in the resist.

17. A method as claimed in claim 1 in which a fluorescent, luminescent and/or phosphorescent material is incorporated in the clear resist.

18. A method as claimed in claim 1 in which a fluorescent material is incorporated in a layer over the resist.

19. A method as claimed in claim 1 in which a fluorescent material is incorporated in a layer on a second side of the film.

20. A method as claimed in claim 1 further comprising the step of laminating to a second side of the film a machine readable construction having a partially metalized or de-metalized polymeric film having a continuous strip of metal along each edge coincident with resist covered metal regions, in which a magnetic material is present in the continuous strips.

21. A substrate formed by the method of claim 1.

22. A patch, foil, stripe, strip or thread formed from the substrate of claim 21.

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23. Security paper incorporating one or more of the patch, foil, stripe, strip or thread of claim 22.

24. A bank note made from the security paper of claim 23.

***Allowable Subject Matter***

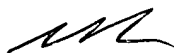
Claims 1-24 are allowed.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roberts Culbert whose telephone number is (571) 272-1433. The examiner can normally be reached on Monday-Friday (8:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Parviz Hassanzadeh can be reached on (571) 272-1435. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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